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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Kenji Sato

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MILES & STOCKBRIDGE PC  
1751 PINNACLE DRIVE  
SUITE 500  
MCLEAN, VA 22102-3833

EXAMINER

WAITS, ALAN B

ART UNIT

PAPER NUMBER

3656

NOTIFICATION DATE

DELIVERY MODE

02/09/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ipdocketing@milesstockbridge.com  
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<b>Office Action Summary</b>	<b>Application No.</b> 10/521,431	<b>Applicant(s)</b> SATO ET AL.	
	<b>Examiner</b> ALAN B. WAITS	<b>Art Unit</b> 3656	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 7-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 February 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Request for Continued Examination***

1. The request filed on January 14, 2009 for a Continued Examination (RCE) is accepted and a continued prosecution application has been established. An action on the RCE follows.

### ***Claim Objections***

2. Claim 1 is objected to because of the following informalities: Perhaps "the corresponding one of" should be --a corresponding one of--. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4, 7, 8 and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barton et al. USP 5730465 in view of Jacobs et al. USP 6516640.

Barton discloses a similar device comprising:

Re clm 1:

- A steering column (9, fig 6) for rotatably supporting a steering shaft (14, fig 7)
- The steering column having an integrally formed bulging distance portion (8, fig 6)

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- The bulging distance portion having flat side wall portions (8A, fig 5) opposed to each other and a bottom wall portion (8D, fig 5) connecting the flat side wall portions
- The flat side wall portions being constructed so as to be fastened to corresponding vehicle body side members such that the steering column is fixed thereto (as shown in figs 1 and 2)

Barton does not disclose:

- A steering lock mount portion on an outer circumference thereof disposed rearwardly of the bulging distance portion
- A steering lock having a key and a first contact surface that is in contact with a first part of an abutting surface of said steering lock mount portion of said steering column
- A lock bracket having a second contact surface that is in contact with a second part of the abutting surface of said steering lock mount portion
- Said first contact surface of said steering lock and said second contact surface of said lock bracket embracing said steering lock mount portion of said steering column
- At least one of the first part and the second part of the abutting surface of the steering lock mount portion has a cross-sectional shape of variable radius
- The corresponding one of said first and second contact surfaces being of a shape complementary thereto

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Jacobs teaches:

- A steering lock mount portion (where 10 attaches to the steering column, fig 1) on an outer circumference thereof disposed rearwardly of the bulging distance portion
- A steering lock (10, fig 2) having a key (col 2, lines 43-50) and a first contact surface (bottom half of 16, fig 2; col 4, lines 3-15) that is in contact with a first part of an abutting surface of said steering lock mount portion of said steering column (where 16 connects to steering column)
- A lock bracket (top half of 16; col 4, lines 3-15) having a second contact surface that is in contact with a second part of the abutting surface of said steering lock mount portion
- Said first contact surface of said steering lock and said second contact surface of said lock bracket embracing said steering lock mount portion of said steering column (col 4, lines 3-15)
- At least one of the first part and the second part of the abutting surface of the steering lock mount portion has a cross-sectional shape of variable radius (left most 16, fig 2; col 4, lines 14-15)
- The corresponding one of said first and second contact surfaces being of a shape complementary thereto (col 4, lines 14-15)

for the purpose of providing a mechanism to prevent vehicle theft or unauthorized use (col 1, line 20).

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It would have been obvious to one of ordinary skill in the art at the time of the invention to have:

- A steering lock mount portion on an outer circumference thereof disposed rearwardly of the bulging distance portion
- A steering lock having a key and a first contact surface that is in contact with a first part of an abutting surface of said steering lock mount portion of said steering column
- A lock bracket having a second contact surface that is in contact with a second part of the abutting surface of said steering lock mount portion
- Said first contact surface of said steering lock and said second contact surface of said lock bracket embracing said steering lock mount portion of said steering column
- At least one of the first part and the second part of the abutting surface of the steering lock mount portion has a cross-sectional shape of variable radius
- The corresponding one of said first and second contact surfaces being of a shape complementary thereto

for the purpose of providing a mechanism to prevent vehicle theft or unauthorized use.

Re clm 2:

- Said first part of the abutting surface of said steering lock mount portion has a part-circular cross section (16, fig 2)

Re clm 3:

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- Said steering lock mount portion and said bulging distance portion are plastically formed by a bulge process

Re clm 4:

- Said bulging distance portion is plastically formed by a bulge process simultaneously with the steering lock mount portion

Re claims 3 and 4, the patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). See MPEP 2113.

Re clm 7:

- Both the first part and second part of the abutting surface having a cross-sectional shape of variable radius (col 4, lines 14-15)

Barton discloses a similar device comprising:

Re clm 8:

- A steering column (9, fig 6) for rotatably supporting a steering shaft (14, fig 7)
- The steering column including an integrally formed bulging distance portion (8, fig 6)
- The bulging distance portion having flat side wall portions (8A, fig 5) opposed to each other and a bottom wall portion (8D, fig 5) connecting the flat side wall portions

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- The flat side wall portions being constructed so as to be fastened to corresponding vehicle body side members such that the steering column is fixed thereto (as shown in figs 1 and 2)

Barton does not disclose:

- An integrally formed steering lock mount portion
- The steering lock mount portion having an abutting surface on its outer circumference
- A steering lock having a key and a first contact surface complementary to and in contact with a first part of said abutting surface
- A lock bracket having a second contact surface complementary to and in contact with a second part of said abutting surface
- The steering lock being attached to the lock bracket such that said first contact surface of said steering lock and said second contact surface of said lock bracket embrace said steering lock mount portion
- Said abutting surface has a non-uniform shape in cross-section such that said abutting surface and at least one of said complementary first and second contact surfaces cooperate

Jacobs teaches:

- An integrally formed steering lock mount portion (where 10 attaches to the steering column, fig 1)
- The steering lock mount portion having an abutting surface on its outer circumference (where 16 meets the steering column)



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- A steering lock (10, fig 2) having a key (col 2, lines 43-50) and a first contact surface (bottom half of 16, fig 2; col 4, lines 3-15) complementary to and in contact with a first part of said abutting surface
- A lock bracket (top half of 16; col 4, lines 3-15) having a second contact surface complementary to and in contact with a second part of said abutting surface
- The steering lock being attached to the lock bracket such that said first contact surface of said steering lock and said second contact surface of said lock bracket embrace said steering lock mount portion (col 4, lines 3-15)
- Said abutting surface has a non-uniform shape in cross-section such that said abutting surface and at least one of said complementary first and second contact surfaces cooperate (left most 16, fig 2; col 4, lines 14-15)

for the purpose of providing a mechanism to prevent vehicle theft or unauthorized use (col 1, line 20).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have:

- An integrally formed steering lock mount portion
- The steering lock mount portion having an abutting surface on its outer circumference
- A steering lock having a key and a first contact surface complementary to and in contact with a first part of said abutting surface

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- A lock bracket having a second contact surface complementary to and in contact with a second part of said abutting surface
- The steering lock being attached to the lock bracket such that said first contact surface of said steering lock and said second contact surface of said lock bracket embrace said steering lock mount portion
- Said abutting surface has a non-uniform shape in cross-section such that said abutting surface and at least one of said complementary first and second contact surfaces cooperate

for the purpose of providing a mechanism to prevent vehicle theft or unauthorized use.

Re clm 10, Barton in view of Jacobs further discloses:

- Said steering lock mount portion includes a bulging portion (where 16 attaches to steering column) of said steering column

Re clm 11:

- The bulging distance portion includes an additional bulging portion (8A, fig 5) plastically formed simultaneously with the steering lock mount portion

Re claims 11, the patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). See MPEP 2113.

Re clm 12:

- The first contact surface of the steering lock and the second contact surface of the lock bracket have cross-sectional shapes of variable radius (col 4, lines 14-15)

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Re clm 13:

- One of the first and second contact surfaces has a cross-sectional shape of constant radius (col 4, lines 3-15)
- The other of the first and second contact surfaces has a cross-sectional shape of variable radius (col 4, lines 3-15)

5. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barton et al. USP 5730465 in view of Jacobs et al. USP 6516640 as applied to claim 8 above, and further in view of Schelling et al. USP 5988679.

Barton in view of Jacobs discloses all the claimed subject as described matter above.

Barton in view of Jacobs does not disclose:

- Said first part of said abutting surface has a part-circular cross-sectional shape
- said second part of said abutting surface has a cross-sectional shape of variable radius

Schelling teaches:

- Said first part of said abutting surface has a part-circular cross-sectional shape (top portion of 7, fig 1)
- said second part of said abutting surface has a cross-sectional shape of variable radius (bottom portion of 7, fig 1)

for the purpose of locking the steering column in place and preventing relative rotation of the steering column to the supporting member (col 2, 49-51).

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It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Barton in view of Jacobs and provide:

- Said first part of said abutting surface has a part-circular cross-sectional shape
- said second part of said abutting surface has a cross-sectional shape of variable radius

for the purpose of locking the steering column in place and preventing relative rotation of the steering column to the supporting member.

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1-4 and 7-13 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALAN B. WAITS whose telephone number is (571)270-3664. The examiner can normally be reached on Monday through Friday 7:30 am to 5 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on 571-272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alan B Waits/  
Examiner, Art Unit 3656

/Richard WL Ridley/  
Supervisory Patent Examiner, Art Unit 3656